

## Mycotoxin Proficiency Testing, Z Scored Against Robust Consensus

Number of Labs Participating: 50

Issue Date: 08/31/2018

### Analytes for Sample # 201863: Poultry Feed

Disclaimer: Z scores are provided for research and method development purposes only!

Lab #	Code	Analyte	Method	Result 1	Result 2	Detect ?		LOD	Probability of Detection	Z Score	Assigned Value	AAFCO $\sigma$ ffp
						D1	D2					
0066	600.13	Total Aflatoxin (ppb)	r-Biopharm Ridascreen FAST Afl S	12.73	13.14	Y	Y			-1.42	24.83	8.381
0202	600.12	Total Aflatoxin (ppb)	r-Biopharm Ridascreen FAST Afl	15.48	16.6	Y	Y			-1.05	24.83	8.381
2192	600.20	Total Aflatoxin (ppb)	LC	16.5	16.25	Y	Y			-1.01	24.83	8.381
2050	600.98	Total Aflatoxin (ppb)	Other Rapid Test Kit	16.5	17.6	Y	Y			-0.93	24.83	8.381
2199	600.14	Total Aflatoxin (ppb)	Vicam Aflatest	18.7	16	Y	Y			-0.89	24.83	8.381
0619	600.24	Total Aflatoxin (ppb)	LC-MS/MS	20	17.3	Y	Y			-0.74	24.83	8.381
0590	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	18.7	18.9	Y	Y			-0.72	24.83	8.381
0013	600.22	Total Aflatoxin (ppb)	Vicam Aflatest, LC-FI	20.96	17.2	Y	Y			-0.69	24.83	8.381
0034	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	19.65	19.6	Y	Y			-0.62	24.83	8.381
0010	600.20	Total Aflatoxin (ppb)	LC	21	19	Y	Y			-0.58	24.83	8.381
2129	600.12	Total Aflatoxin (ppb)	r-Biopharm Ridascreen FAST Afl	20.7	19.6	Y	Y			-0.56	24.83	8.381
0004	600.14	Total Aflatoxin (ppb)	Vicam Aflatest	21	20.24	Y	Y			-0.50	24.83	8.381
0226	600.20	Total Aflatoxin (ppb)	LC	22.5	23.2	Y	Y			-0.24	24.83	8.381
0511	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	24	23	Y	Y			-0.16	24.83	8.381
0407	600.13	Total Aflatoxin (ppb)	r-Biopharm Ridascreen FAST Afl S	24.075	25.18	Y	Y			-0.02	24.83	8.381
0590	600.12	Total Aflatoxin (ppb)	r-Biopharm Ridascreen FAST Afl	25.4	24.7	Y	Y			0.03	24.83	8.381
2096	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	27.9	22.2	Y	Y			0.03	24.83	8.381
0297	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	25.4	26.1	Y	Y			0.11	24.83	8.381
0876	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	24.8	27.5	Y	Y			0.16	24.83	8.381
2022	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	26.74	26.41	Y	Y			0.21	24.83	8.381
0723	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	26.7	26.5	Y	Y			0.21	24.83	8.381
2022	600.08	Total Aflatoxin (ppb)	Romer AgraQuant Total Afl 4-40ppb	26.49	27.48	Y	Y			0.26	24.83	8.381
0042	600.20	Total Aflatoxin (ppb)	LC	29.78	24.35	Y	Y			0.27	24.83	8.381
0098	600.21	Total Aflatoxin (ppb)	LC-PCD FI	27.29	28.53	Y	Y			0.37	24.83	8.381
2226	600.12	Total Aflatoxin (ppb)	r-Biopharm Ridascreen FAST Afl	27.6	28.8	Y	Y			0.40	24.83	8.381
0227	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	25	32	Y	Y			0.44	24.83	8.381
0045	600.04	Total Aflatoxin (ppb)	Charm ROSA Fast 5 Aflatoxin Qu	27	30	Y	Y			0.44	24.83	8.381
0032	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	28	30.7	Y	Y			0.54	24.83	8.381
0035	600.13	Total Aflatoxin (ppb)	r-Biopharm Ridascreen FAST Afl S	29.848	32.398	Y	Y			0.75	24.83	8.381
0554	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	28.5	34.6	Y	Y			0.80	24.83	8.381
0870	600.98	Total Aflatoxin (ppb)	Other Rapid Test Kit	30.6	32.7	Y	Y			0.81	24.83	8.381
2113	600.01	Total Aflatoxin (ppb)	Neogen Veratox Aflatoxin	30	34	Y	Y			0.86	24.83	8.381
0043	600.08	Total Aflatoxin (ppb)	Romer AgraQuant Total Afl 4-40ppb	34.7	29.9	Y	Y			0.89	24.83	8.381
0218	600.24	Total Aflatoxin (ppb)	LC-MS/MS	34.5	35.5	Y	Y			1.21	24.83	8.381
2033	600.24	Total Aflatoxin (ppb)	LC-MS/MS	41.1	34.1	Y	Y			1.52	24.83	8.381

Lab #	Code	Analyte	Method	Result 1	Result 2	Detect ?		LOD	Probability of Detection	Z Score	Assigned Value	AAFCO $\sigma$ ffp
						D1	D2					
2169	600.98	Total Aflatoxin (ppb)	Other Rapid Test Kit			N	N	2	99.68%	NoZ	24.83	8.381
2192	601.20	AB1 (ppb)	LC	12.76	12.45	Y	Y			-1.57	26.67	8.984
0619	601.23	AB1 (ppb)	LC-MS/MS	18.8	16.4	Y	Y			-1.01	26.67	8.984
2066	601.20	AB1 (ppb)	LC	17.2	18.4	Y	Y			-0.99	26.67	8.984
0013	601.24	AB1 (ppb)	Vicam Aflatest, LC-FI	19.69	16.2	Y	Y			-0.97	26.67	8.984
0027	601.21	AB1 (ppb)	LC-PCD FI	21.329	16.562	Y	Y			-0.86	26.67	8.984
2053	601.24	AB1 (ppb)	Vicam Aflatest, LC-FI	21.5	21.1	Y	Y			-0.60	26.67	8.984
0870	601.23	AB1 (ppb)	LC-MS/MS	21.72	20.92	Y	Y			-0.60	26.67	8.984
0226	601.24	AB1 (ppb)	Vicam Aflatest, LC-FI	21.1	21.8	Y	Y			-0.58	26.67	8.984
0028	601.23	AB1 (ppb)	LC-MS/MS	20.9	23.2	Y	Y			-0.51	26.67	8.984
0918	601.23	AB1 (ppb)	LC-MS/MS	23.9	22	Y	Y			-0.41	26.67	8.984
0964	601.23	AB1 (ppb)	LC-MS/MS	24.4	23.4	Y	Y			-0.31	26.67	8.984
0098	601.21	AB1 (ppb)	LC-PCD FI	25.09	26.3	Y	Y			-0.11	26.67	8.984
0009	601.99	AB1 (ppb)	Miscellaneous	29.14	22.97	Y	Y			-0.07	26.67	8.984
2207	601.23	AB1 (ppb)	LC-MS/MS	32	28	Y	Y			0.37	26.67	8.984
0868	601.98	AB1 (ppb)	Other Rapid Test Kit	29.5	30.8	Y	Y			0.39	26.67	8.984
0868	601.91	AB1 (ppb)	Romer AgraQuant Afl B1	29.1	31.8	Y	Y			0.42	26.67	8.984
0913	601.23	AB1 (ppb)	LC-MS/MS	30.59	31.07	Y	Y			0.46	26.67	8.984
2185	601.98	AB1 (ppb)	Other Rapid Test Kit	31.2	31.6	Y	Y			0.53	26.67	8.984
0910	601.21	AB1 (ppb)	LC-PCD FI	30.93	32.93	Y	Y			0.59	26.67	8.984
0009	601.23	AB1 (ppb)	LC-MS/MS	30.15	33.712	Y	Y			0.59	26.67	8.984
0218	601.23	AB1 (ppb)	LC-MS/MS	32.3	33.5	Y	Y			0.69	26.67	8.984
0868	601.21	AB1 (ppb)	LC-PCD FI	34.7	33.8	Y	Y			0.84	26.67	8.984
2033	601.23	AB1 (ppb)	LC-MS/MS	39.3	32.8	Y	Y			1.04	26.67	8.984
2140	601.23	AB1 (ppb)	LC-MS/MS	37	36	Y	Y			1.09	26.67	8.984
0553	601.23	AB1 (ppb)	LC-MS/MS	45.79	36.76	Y	Y			1.63	26.67	8.984
2066	602.20	AB2 (ppb)	LC	0.9	0.97	Y	Y			-1.19	1.65	0.599
0619	602.23	AB2 (ppb)	LC-MS/MS	1.19	0.93	Y	Y			-0.98	1.65	0.599
0013	602.24	AB2 (ppb)	Vicam Aflatest, LC-FI	1.27	1	Y	Y			-0.86	1.65	0.599
0918	602.23	AB2 (ppb)	LC-MS/MS	1.42	1.05	Y	Y			-0.69	1.65	0.599
2053	602.24	AB2 (ppb)	Vicam Aflatest, LC-FI	1.3	1.3	Y	Y			-0.58	1.65	0.599
0870	602.23	AB2 (ppb)	LC-MS/MS	1.48	1.3	Y	Y			-0.43	1.65	0.599
2192	602.20	AB2 (ppb)	LC	1.9	1.08	Y	Y			-0.27	1.65	0.599
2207	602.23	AB2 (ppb)	LC-MS/MS	2	1	Y	Y			-0.25	1.65	0.599
2033	602.23	AB2 (ppb)	LC-MS/MS	1.8	1.3	Y	Y			-0.17	1.65	0.599
0913	602.23	AB2 (ppb)	LC-MS/MS	1.93	1.48	Y	Y			0.09	1.65	0.599
0964	602.23	AB2 (ppb)	LC-MS/MS	2.1	1.6	Y	Y			0.33	1.65	0.599
0027	602.21	AB2 (ppb)	LC-PCD FI	2.045	1.656	Y	Y			0.33	1.65	0.599
0009	602.23	AB2 (ppb)	LC-MS/MS	1.768	2.124	Y	Y			0.49	1.65	0.599
0910	602.21	AB2 (ppb)	LC-PCD FI	2.01	1.92	Y	Y			0.53	1.65	0.599
0868	602.21	AB2 (ppb)	LC-PCD FI	2.1	2	Y	Y			0.67	1.65	0.599
0218	602.23	AB2 (ppb)	LC-MS/MS	2.2	2.1	Y	Y			0.83	1.65	0.599
0098	602.21	AB2 (ppb)	LC-PCD FI	2.2	2.23	Y	Y			0.94	1.65	0.599

Lab #	Code	Analyte	Method	Result 1	Result 2	Detect ?		LOD	Probability of Detection	Z Score	Assigned Value	AAFCO $\sigma$ ffp
						D1	D2					
0553	602.23	AB2 (ppb)	LC-MS/MS	3.94	3.55	Y	Y			<b>3.50</b>	1.65	0.599
2140	602.23	AB2 (ppb)	LC-MS/MS			N	N	20	0.00%	<b>NoZ</b>	1.65	0.599
0226	602.24	AB2 (ppb)	Vicam Aflatest, LC-FI			N	N	1	86.09%	<b>NoZ</b>	1.65	0.599
0009	602.99	AB2 (ppb)	Miscellaneous			N	N	3.23	0.42%	<b>NoZ</b>	1.65	0.599
0910	603.21	AG1 (ppb)	LC-PCD FI	0.26	0.32	Y	Y			<b>-1.62</b>	0.73	0.271
2053	603.24	AG1 (ppb)	Vicam Aflatest, LC-FI	0.4		Y	N	0.1	98.99%	<b>-1.22</b>	0.73	0.271
0009	603.23	AG1 (ppb)	LC-MS/MS	0.936	0.864	Y	Y			<b>0.63</b>	0.73	0.271
0553	603.23	AG1 (ppb)	LC-MS/MS	1	1	Y	Y			<b>1.00</b>	0.73	0.271
2192	603.20	AG1 (ppb)	LC	[0]	[0.87]	Y	Y				0.73	0.271
0619	603.23	AG1 (ppb)	LC-MS/MS	[0]	[0]	Y	Y				0.73	0.271
2066	603.20	AG1 (ppb)	LC			N	N	0.14	98.52%	<b>NoZ</b>	0.73	0.271
0098	603.21	AG1 (ppb)	LC-PCD FI			N	N	15	0.00%	<b>NoZ</b>	0.73	0.271
0218	603.23	AG1 (ppb)	LC-MS/MS			N	N	1	15.96%	<b>NoZ</b>	0.73	0.271
0870	603.23	AG1 (ppb)	LC-MS/MS			N	N	0.6	68.42%	<b>NoZ</b>	0.73	0.271
0913	603.23	AG1 (ppb)	LC-MS/MS			N	N	1	15.96%	<b>NoZ</b>	0.73	0.271
0918	603.23	AG1 (ppb)	LC-MS/MS			N	N	1	15.96%	<b>NoZ</b>	0.73	0.271
0964	603.23	AG1 (ppb)	LC-MS/MS			N	N	1	15.96%	<b>NoZ</b>	0.73	0.271
2033	603.23	AG1 (ppb)	LC-MS/MS			N	N	1	15.96%	<b>NoZ</b>	0.73	0.271
2140	603.23	AG1 (ppb)	LC-MS/MS			N	N	20	0.00%	<b>NoZ</b>	0.73	0.271
2207	603.23	AG1 (ppb)	LC-MS/MS			N	N	1	15.96%	<b>NoZ</b>	0.73	0.271
0013	603.24	AG1 (ppb)	Vicam Aflatest, LC-FI			N	N	1.67	0.03%	<b>NoZ</b>	0.73	0.271
0226	603.24	AG1 (ppb)	Vicam Aflatest, LC-FI			N	N	2	0.00%	<b>NoZ</b>	0.73	0.271
0009	603.99	AG1 (ppb)	Miscellaneous			N	N	3.19	0.00%	<b>NoZ</b>	0.73	0.271
2053	604.24	AG2 (ppb)	Vicam Aflatest, LC-FI	0.3		Y	N	0.1	99.46%	<b>-2.16</b>	1.423	0.519
0553	604.23	AG2 (ppb)	LC-MS/MS	1	1	Y	Y			<b>-0.81</b>	1.423	0.519
2192	604.20	AG2 (ppb)	LC	1.84	1.85	Y	Y			<b>0.81</b>	1.423	0.519
2066	604.20	AG2 (ppb)	LC	29.5	32	Y	Y			<b>56.53</b>	1.423	0.519
0009	604.23	AG2 (ppb)	LC-MS/MS	[0]	[0]	Y	Y				1.423	0.519
0619	604.23	AG2 (ppb)	LC-MS/MS	[0]	[0]	Y	Y				1.423	0.519
0913	604.23	AG2 (ppb)	LC-MS/MS	[0]	[0]	Y	Y				1.423	0.519
0098	604.21	AG2 (ppb)	LC-PCD FI			N	N	5	0.00%	<b>NoZ</b>	1.423	0.519
0910	604.21	AG2 (ppb)	LC-PCD FI			N	N	0.01	99.68%	<b>NoZ</b>	1.423	0.519
0218	604.23	AG2 (ppb)	LC-MS/MS			N	N	1	79.23%	<b>NoZ</b>	1.423	0.519
0870	604.23	AG2 (ppb)	LC-MS/MS			N	N	1	79.23%	<b>NoZ</b>	1.423	0.519
0918	604.23	AG2 (ppb)	LC-MS/MS			N	N	1	79.23%	<b>NoZ</b>	1.423	0.519
0964	604.23	AG2 (ppb)	LC-MS/MS			N	N	2.49	1.98%	<b>NoZ</b>	1.423	0.519
2033	604.23	AG2 (ppb)	LC-MS/MS			N	N	1	79.23%	<b>NoZ</b>	1.423	0.519
2140	604.23	AG2 (ppb)	LC-MS/MS			N	N	20	0.00%	<b>NoZ</b>	1.423	0.519
2207	604.23	AG2 (ppb)	LC-MS/MS			N	N	1	79.23%	<b>NoZ</b>	1.423	0.519
0013	604.24	AG2 (ppb)	Vicam Aflatest, LC-FI			N	N	0.5	96.23%	<b>NoZ</b>	1.423	0.519
0226	604.24	AG2 (ppb)	Vicam Aflatest, LC-FI			N	N	1	79.23%	<b>NoZ</b>	1.423	0.519
0009	604.99	AG2 (ppb)	Miscellaneous			N	N	3.21	0.03%	<b>NoZ</b>	1.423	0.519
2129	610.07	Deoxynivalenol (ppb)	r-Biopharm Ridascreen FAST DOI	[1.38]	[1.39]	Y	Y			<b>-3.30</b>	1,363	412.7

Lab #	Code	Analyte	Method	Result 1	Result 2	Detect ?		LOD	Probability of Detection	Z Score	Assigned Value	AAFCO $\sigma$ ffp
						D1	D2					
0554	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	[1.6]	[1.7]	Y	Y			-3.30	1,363	412.7
0045	610.04	Deoxynivalenol (ppb)	Charm ROSA Fast 5 DON Quant	450	300	Y	Y			-2.39	1,363	412.7
2050	610.98	Deoxynivalenol (ppb)	Other Rapid Test Kit	830	840	Y	Y			-1.28	1,363	412.7
0553	610.23	Deoxynivalenol (ppb)	LC-MS/MS	1,031	686.2	Y	Y			-1.22	1,363	412.7
0028	610.23	Deoxynivalenol (ppb)	LC-MS/MS	963	821	Y	Y			-1.14	1,363	412.7
0619	610.23	Deoxynivalenol (ppb)	LC-MS/MS	835	987	Y	Y			-1.09	1,363	412.7
0098	610.20	Deoxynivalenol (ppb)	LC	1,000	1,000	Y	Y			-0.88	1,363	412.7
0870	610.99	Deoxynivalenol (ppb)	Miscellaneous	1,180	1,120	Y	Y			-0.52	1,363	412.7
2066	610.07	Deoxynivalenol (ppb)	r-Biopharm Ridascreen FAST DON	1,190	1,130	Y	Y			-0.49	1,363	412.7
0913	610.23	Deoxynivalenol (ppb)	LC-MS/MS	1,180	1,140	Y	Y			-0.49	1,363	412.7
0202	610.06	Deoxynivalenol (ppb)	r-Biopharm Ridascreen DON	1,138	1,190	Y	Y			-0.48	1,363	412.7
2185	610.98	Deoxynivalenol (ppb)	Other Rapid Test Kit	1,172	1,186	Y	Y			-0.45	1,363	412.7
2207	610.23	Deoxynivalenol (ppb)	LC-MS/MS	1,170	1,270	Y	Y			-0.35	1,363	412.7
0218	610.25	Deoxynivalenol (ppb)	GC-MS	1,240	1,220	Y	Y			-0.32	1,363	412.7
0590	610.07	Deoxynivalenol (ppb)	r-Biopharm Ridascreen FAST DON	1,190	1,275	Y	Y			-0.32	1,363	412.7
2155	610.23	Deoxynivalenol (ppb)	LC-MS/MS	1,200	1,280	Y	Y			-0.30	1,363	412.7
0870	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,200	1,300	Y	Y			-0.27	1,363	412.7
2033	610.23	Deoxynivalenol (ppb)	LC-MS/MS	1,378	1,160	Y	Y			-0.23	1,363	412.7
0964	610.23	Deoxynivalenol (ppb)	LC-MS/MS	1,356	1,219	Y	Y			-0.18	1,363	412.7
0297	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,400	1,200	Y	Y			-0.15	1,363	412.7
2140	610.23	Deoxynivalenol (ppb)	LC-MS/MS	1,339	1,302	Y	Y			-0.10	1,363	412.7
0918	610.23	Deoxynivalenol (ppb)	LC-MS/MS	1,319	1,362	Y	Y			-0.05	1,363	412.7
0032	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,366	1,318	Y	Y			-0.05	1,363	412.7
0227	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,400	1,300	Y	Y			-0.03	1,363	412.7
0009	610.07	Deoxynivalenol (ppb)	r-Biopharm Ridascreen FAST DON	1,365	1,350	Y	Y			-0.01	1,363	412.7
0066	610.08	Deoxynivalenol (ppb)	r-Biopharm Ridascreen FAST DON	1,350	1,400	Y	Y			0.03	1,363	412.7
2053	610.23	Deoxynivalenol (ppb)	LC-MS/MS	1,370	1,390	Y	Y			0.04	1,363	412.7
0870	610.23	Deoxynivalenol (ppb)	LC-MS/MS	1,420	1,360	Y	Y			0.07	1,363	412.7
2113	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,500	1,300	Y	Y			0.09	1,363	412.7
0910	610.20	Deoxynivalenol (ppb)	LC	1,370	1,450	Y	Y			0.11	1,363	412.7
0407	610.07	Deoxynivalenol (ppb)	r-Biopharm Ridascreen FAST DON	1,417	1,443	Y	Y			0.16	1,363	412.7
0723	610.20	Deoxynivalenol (ppb)	LC	1,450	1,430	Y	Y			0.19	1,363	412.7
2169	610.98	Deoxynivalenol (ppb)	Other Rapid Test Kit	1,500	1,400	Y	Y			0.21	1,363	412.7
2022	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,550	1,550	Y	Y			0.45	1,363	412.7
0413	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,600	1,500	Y	Y			0.45	1,363	412.7
0027	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,800	1,400	Y	Y			0.57	1,363	412.7
0413	610.20	Deoxynivalenol (ppb)	LC	1,600	1,600	Y	Y			0.57	1,363	412.7
0723	610.05	Deoxynivalenol (ppb)	Romer AgraQuant DON	1,613	1,620	Y	Y			0.61	1,363	412.7
2192	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	1,660	1,580	Y	Y			0.62	1,363	412.7
0226	610.09	Deoxynivalenol (ppb)	Vicam DON-V	1,700	1,700	Y	Y			0.82	1,363	412.7
0035	610.08	Deoxynivalenol (ppb)	r-Biopharm Ridascreen FAST DON	1,672	1,747	Y	Y			0.84	1,363	412.7
0868	610.98	Deoxynivalenol (ppb)	Other Rapid Test Kit	1,710	1,720	Y	Y			0.85	1,363	412.7
2022	610.05	Deoxynivalenol (ppb)	Romer AgraQuant DON	1,900	1,900	Y	Y			1.30	1,363	412.7

Lab #	Code	Analyte	Method	Result 1	Result 2	Detect ?		LOD	Probability of Detection	Z Score	Assigned Value	AAFCO $\sigma$ ffp
						D1	D2					
0043	610.05	Deoxynivalenol (ppb)	Romer AgraQuant DON	2,140	1,740	Y	Y			1.40	1,363	412.7
0868	610.05	Deoxynivalenol (ppb)	Romer AgraQuant DON	2,050	2,080	Y	Y			1.70	1,363	412.7
0868	610.20	Deoxynivalenol (ppb)	LC	2,100	2,150	Y	Y			1.85	1,363	412.7
0511	610.01	Deoxynivalenol (ppb)	Neogen Veratox for DON	10,400	9,500	Y	Y			20.81	1,363	412.7
2226	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	[3.54]	[2.93]	Y	Y			-3.45	6,668	1,934
0297	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	[5.5]	[5.5]	Y	Y			-3.44	6,668	1,934
2129	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	[5.59]	[5.482]	Y	Y			-3.44	6,668	1,934
0554	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	[5.6]	[6.1]	Y	Y			-3.44	6,668	1,934
0511	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	1,600	1,700	Y	Y			-2.59	6,668	1,934
2192	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	4,050	4,410	Y	Y			-1.26	6,668	1,934
0619	620.23	Total Fumonisin (ppb)	LC-MS/MS	4,341	4,216	Y	Y			-1.24	6,668	1,934
2113	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	4,300	4,900	Y	Y			-1.07	6,668	1,934
0045	620.04	Total Fumonisin (ppb)	Charm ROSA Fast 5 FUMQ	4,400	5,800	Y	Y			-0.81	6,668	1,934
0027	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	5,850	5,210	Y	Y			-0.59	6,668	1,934
0010	620.23	Total Fumonisin (ppb)	LC-MS/MS	6,000	6,000	Y	Y			-0.35	6,668	1,934
0098	620.11	Total Fumonisin (ppb)	Vicam Fumonitest	5,000	7,300	Y	Y			-0.27	6,668	1,934
0868	620.07	Total Fumonisin (ppb)	Romer AgraQuant Total Fumonisir	6,220	6,310	Y	Y			-0.21	6,668	1,934
0407	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	6,900	6,770	Y	Y			0.09	6,668	1,934
0202	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	6,495	7,231	Y	Y			0.10	6,668	1,934
0035	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	7,239	6,783	Y	Y			0.18	6,668	1,934
2033	620.23	Total Fumonisin (ppb)	LC-MS/MS	7,310	7,580	Y	Y			0.40	6,668	1,934
0032	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	7,805	7,111	Y	Y			0.41	6,668	1,934
0066	620.09	Total Fumonisin (ppb)	r-Biopharm Ridascreen FAST FUM	7,500	7,800	Y	Y			0.51	6,668	1,934
2022	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	7,840	8,080	Y	Y			0.67	6,668	1,934
0227	620.01	Total Fumonisin (ppb)	Neogen Veratox Fumonisin	9,000	8,000	Y	Y			0.95	6,668	1,934
2022	620.07	Total Fumonisin (ppb)	Romer AgraQuant Total Fumonisir	8,480	8,550	Y	Y			0.95	6,668	1,934
0226	620.21	Total Fumonisin (ppb)	LC-FI OPA der.	8,725	10,733	Y	Y			1.58	6,668	1,934
0870	620.02	Total Fumonisin (ppb)	Neogen Veratox Fumonisin 5/10	11,000	13,050	Y	Y			2.77	6,668	1,934
2053	621.22	FB1 (ppb)	LC-MS	[8.4]	[8.5]	Y	Y			-3.40	4,483	1,314
0913	621.23	FB1 (ppb)	LC-MS/MS	1,840	2,010	Y	Y			-1.95	4,483	1,314
0619	621.23	FB1 (ppb)	LC-MS/MS	3,365	3,189	Y	Y			-0.92	4,483	1,314
2207	621.23	FB1 (ppb)	LC-MS/MS	4,000	3,900	Y	Y			-0.41	4,483	1,314
0910	621.21	FB1 (ppb)	LC-FI OPA der.	3,768	4,238	Y	Y			-0.37	4,483	1,314
0964	621.23	FB1 (ppb)	LC-MS/MS	4,020	4,047	Y	Y			-0.34	4,483	1,314
0218	621.23	FB1 (ppb)	LC-MS/MS	4,160	4,170	Y	Y			-0.24	4,483	1,314
0553	621.23	FB1 (ppb)	LC-MS/MS	4,336	4,197	Y	Y			-0.16	4,483	1,314
0870	621.23	FB1 (ppb)	LC-MS/MS	5,000	4,800	Y	Y			0.32	4,483	1,314
0098	621.20	FB1 (ppb)	LC	4,100	5,900	Y	Y			0.39	4,483	1,314
2140	621.23	FB1 (ppb)	LC-MS/MS	5,361	5,000	Y	Y			0.53	4,483	1,314
0009	621.23	FB1 (ppb)	LC-MS/MS	5,376	5,070	Y	Y			0.56	4,483	1,314
2033	621.23	FB1 (ppb)	LC-MS/MS	5,060	5,567	Y	Y			0.63	4,483	1,314
0226	621.21	FB1 (ppb)	LC-FI OPA der.	6,100	7,700	Y	Y			1.84	4,483	1,314
2053	622.22	FB2 (ppb)	LC-MS	[1.7]	[1.7]	Y	Y			-3.29	1,214	368.8

Lab #	Code	Analyte	Method	Result 1	Result 2	Detect ?		LOD	Probability of Detection	Z Score	Assigned Value	AAFCO $\sigma$ ffp
						D1	D2					
0913	622.23	FB2 (ppb)	LC-MS/MS	560	510	Y	Y			-1.84	1,214	368.8
0910	622.21	FB2 (ppb)	LC-FI OPA der.	757	947	Y	Y			-0.98	1,214	368.8
2207	622.23	FB2 (ppb)	LC-MS/MS	1,000	1,000	Y	Y			-0.58	1,214	368.8
0619	622.23	FB2 (ppb)	LC-MS/MS	976	1,028	Y	Y			-0.58	1,214	368.8
0218	622.23	FB2 (ppb)	LC-MS/MS	1,110	1,090	Y	Y			-0.31	1,214	368.8
0870	622.23	FB2 (ppb)	LC-MS/MS	1,160	1,100	Y	Y			-0.23	1,214	368.8
0098	622.20	FB2 (ppb)	LC	900	1,400	Y	Y			-0.17	1,214	368.8
0964	622.23	FB2 (ppb)	LC-MS/MS	1,270	1,333	Y	Y			0.24	1,214	368.8
0553	622.23	FB2 (ppb)	LC-MS/MS	1,567	1,114	Y	Y			0.34	1,214	368.8
2140	622.23	FB2 (ppb)	LC-MS/MS	1,292	1,414	Y	Y			0.38	1,214	368.8
0009	622.23	FB2 (ppb)	LC-MS/MS	1,541	1,535	Y	Y			0.88	1,214	368.8
2033	622.23	FB2 (ppb)	LC-MS/MS	1,688	1,491	Y	Y			1.02	1,214	368.8
0226	622.21	FB2 (ppb)	LC-FI OPA der.	1,800	2,300	Y	Y			2.27	1,214	368.8
2053	623.22	FB3 (ppb)	LC-MS	[0.8]	[0.8]	Y	Y			-3.21	509	158.3
0913	623.23	FB3 (ppb)	LC-MS/MS	160	220	Y	Y			-2.02	509	158.3
0870	623.23	FB3 (ppb)	LC-MS/MS	480	480	Y	Y			-0.18	509	158.3
0553	623.23	FB3 (ppb)	LC-MS/MS	559.7	507.8	Y	Y			0.16	509	158.3
2033	623.23	FB3 (ppb)	LC-MS/MS	561	522	Y	Y			0.21	509	158.3
0226	623.21	FB3 (ppb)	LC-FI OPA der.	800	800	Y	Y			1.84	509	158.3
0066	630.05	Ochratoxin A (ppb)	r-Biopharm Ridascreen FAST Och	82.63	84	Y	Y			-1.88	208	66.279
2022	630.01	Ochratoxin A (ppb)	Neogen Veratox Ochratoxin	84.64	84.24	Y	Y			-1.86	208	66.279
0870	630.23	Ochratoxin A (ppb)	LC-MS/MS	99.8	80.6	Y	Y			-1.78	208	66.279
2207	630.23	Ochratoxin A (ppb)	LC-MS/MS	111	103	Y	Y			-1.52	208	66.279
0964	630.23	Ochratoxin A (ppb)	LC-MS/MS	149	113.1	Y	Y			-1.16	208	66.279
0910	630.21	Ochratoxin A (ppb)	LC-PCD FI	172.3	178.4	Y	Y			-0.49	208	66.279
0723	630.03	Ochratoxin A (ppb)	Romer AgraQuant Ochratoxin	182	185	Y	Y			-0.37	208	66.279
2022	630.03	Ochratoxin A (ppb)	Romer AgraQuant Ochratoxin	185.6	191.3	Y	Y			-0.29	208	66.279
2192	630.20	Ochratoxin A (ppb)	LC	187.2	191.7	Y	Y			-0.28	208	66.279
0619	630.23	Ochratoxin A (ppb)	LC-MS/MS	187	200	Y	Y			-0.22	208	66.279
0870	630.98	Ochratoxin A (ppb)	Other Rapid Test Kit	207	193	Y	Y			-0.12	208	66.279
0918	630.23	Ochratoxin A (ppb)	LC-MS/MS	213.6	204.2	Y	Y			0.01	208	66.279
2033	630.23	Ochratoxin A (ppb)	LC-MS/MS	200	220	Y	Y			0.03	208	66.279
0868	630.03	Ochratoxin A (ppb)	Romer AgraQuant Ochratoxin	229.4	202.2	Y	Y			0.12	208	66.279
0227	630.01	Ochratoxin A (ppb)	Neogen Veratox Ochratoxin	222	233	Y	Y			0.29	208	66.279
0218	630.23	Ochratoxin A (ppb)	LC-MS/MS	238	234	Y	Y			0.42	208	66.279
2226	630.05	Ochratoxin A (ppb)	r-Biopharm Ridascreen FAST Och	209.4	277.8	Y	Y			0.54	208	66.279
0098	630.20	Ochratoxin A (ppb)	LC	244	246	Y	Y			0.56	208	66.279
2140	630.23	Ochratoxin A (ppb)	LC-MS/MS	256	235	Y	Y			0.57	208	66.279
0009	630.23	Ochratoxin A (ppb)	LC-MS/MS	261.6	232.4	Y	Y			0.59	208	66.279
2129	630.05	Ochratoxin A (ppb)	r-Biopharm Ridascreen FAST Och	273	244	Y	Y			0.76	208	66.279
0913	630.23	Ochratoxin A (ppb)	LC-MS/MS	262.6	257.6	Y	Y			0.79	208	66.279
0553	630.23	Ochratoxin A (ppb)	LC-MS/MS	321.2	287.4	Y	Y			1.45	208	66.279
2053	630.23	Ochratoxin A (ppb)	LC-MS/MS	360	332	Y	Y			2.08	208	66.279

Lab #	Code	Analyte	Method	Result 1	Result 2	Detect ?		LOD	Probability of Detection	Z Score	Assigned Value	AAFCO $\sigma$ ffp
						D1	D2					
0407	630.04	Ochratoxin A (ppb)	r-Biopharm Ridascreen Ochratoxin	352.1	384.9	Y	Y			2.42	208	66.279
0226	630.06	Ochratoxin A (ppb)	Vicam OchraTest			N	N	46	99.27%	NoZ	208	66.279
0910	640.21	T-2 (ppb)	LC-PCD FI	46.8	40.4	Y	Y			-1.31	76.337	24.994
2033	640.23	T-2 (ppb)	LC-MS/MS	48	48.2	Y	Y			-1.13	76.337	24.994
0619	640.23	T-2 (ppb)	LC-MS/MS	50.9	63	Y	Y			-0.78	76.337	24.994
0870	640.23	T-2 (ppb)	LC-MS/MS	63.72	55.78	Y	Y			-0.66	76.337	24.994
0913	640.23	T-2 (ppb)	LC-MS/MS	60.84	62.66	Y	Y			-0.58	76.337	24.994
2140	640.23	T-2 (ppb)	LC-MS/MS	67	64	Y	Y			-0.43	76.337	24.994
0918	640.23	T-2 (ppb)	LC-MS/MS	69.6	66.56	Y	Y			-0.33	76.337	24.994
2053	640.23	T-2 (ppb)	LC-MS/MS	68.8	67.7	Y	Y			-0.32	76.337	24.994
0218	640.23	T-2 (ppb)	LC-MS/MS	71	71	Y	Y			-0.21	76.337	24.994
0553	640.23	T-2 (ppb)	LC-MS/MS	69.08	85.16	Y	Y			0.03	76.337	24.994
0066	640.03	T-2 (ppb)	Romer AgraQuant T-2	80.15	80.36	Y	Y			0.16	76.337	24.994
0868	640.03	T-2 (ppb)	Romer AgraQuant T-2	82.5	85.07	Y	Y			0.30	76.337	24.994
2129	640.05	T-2 (ppb)	r-Biopharm Ridascreen FAST T-2	99.12	99.52	Y	Y			0.92	76.337	24.994
0407	640.05	T-2 (ppb)	r-Biopharm Ridascreen FAST T-2	108	109.5	Y	Y			1.30	76.337	24.994
2207	640.23	T-2 (ppb)	LC-MS/MS	110	120	Y	Y			1.55	76.337	24.994
0202	640.05	T-2 (ppb)	r-Biopharm Ridascreen FAST T-2	111.1	121.7	Y	Y			1.60	76.337	24.994
0910	641.21	HT-2 (ppb)	LC post-col photochem der. FI	68	52	Y	Y			-1.31	104.2	33.824
2033	641.23	HT-2 (ppb)	LC-MS/MS	75.9	76.6	Y	Y			-0.83	104.2	33.824
0619	641.23	HT-2 (ppb)	LC-MS/MS	80	82.1	Y	Y			-0.68	104.2	33.824
0870	641.23	HT-2 (ppb)	LC-MS/MS	93.32	81.74	Y	Y			-0.49	104.2	33.824
0913	641.23	HT-2 (ppb)	LC-MS/MS	84.65	94.96	Y	Y			-0.43	104.2	33.824
2053	641.23	HT-2 (ppb)	LC-MS/MS	95.5	111	Y	Y			-0.03	104.2	33.824
0218	641.23	HT-2 (ppb)	LC-MS/MS	104	108	Y	Y			0.05	104.2	33.824
2207	641.23	HT-2 (ppb)	LC-MS/MS	120	120	Y	Y			0.47	104.2	33.824
2140	641.23	HT-2 (ppb)	LC-MS/MS	133	181	Y	Y			1.56	104.2	33.824
0964	641.23	HT-2 (ppb)	LC-MS/MS	206.8	203.9	Y	Y			2.99	104.2	33.824
2113	642.21	T-2 + HT-2 (ppb)	Neogen Veratox T-2 + HT-2	207	160	Y	Y			-0.55	222.5	70.767
0870	642.21	T-2 + HT-2 (ppb)	Neogen Veratox T-2 + HT-2	199.2	193	Y	Y			-0.37	222.5	70.767
0227	642.21	T-2 + HT-2 (ppb)	Neogen Veratox T-2 + HT-2	199	203	Y	Y			-0.30	222.5	70.767
2192	642.21	T-2 + HT-2 (ppb)	Neogen Veratox T-2 + HT-2	161.7	244.2	Y	Y			-0.28	222.5	70.767
0590	642.98	T-2 + HT-2 (ppb)	Other Rapid Test Kit	232	247	Y	Y			0.24	222.5	70.767
2022	642.21	T-2 + HT-2 (ppb)	Neogen Veratox T-2 + HT-2	249.6	250.5	Y	Y			0.39	222.5	70.767
0045	642.98	T-2 + HT-2 (ppb)	Other Rapid Test Kit	2,100	1,100	Y	Y			19.47	222.5	70.767
2192	650.20	Zearalenone (ppb)	LC	43.98	65.37	Y	Y			-2.14	173.3	55.489
0066	650.07	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON	65.3	68.2	Y	Y			-1.92	173.3	55.489
2207	650.24	Zearalenone (ppb)	LC-MS/MS	80	80	Y	Y			-1.68	173.3	55.489
0045	650.02	Zearalenone (ppb)	Charm ROSA Zearalenone Quant	112	104	Y	Y			-1.18	173.3	55.489
0035	650.07	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON	116	111.8	Y	Y			-1.07	173.3	55.489
0870	650.24	Zearalenone (ppb)	LC-MS/MS	120.3	109.5	Y	Y			-1.05	173.3	55.489
2155	650.24	Zearalenone (ppb)	LC-MS/MS	118	121.7	Y	Y			-0.96	173.3	55.489
0202	650.06	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON	123.8	125.9	Y	Y			-0.87	173.3	55.489

Lab #	Code	Analyte	Method	Result 1	Result 2	Detect ?		LOD	Probability of Detection	Z Score	Assigned Value	AAFCO $\sigma$ ffp
						D1	D2					
2033	650.24	Zearalenone (ppb)	LC-MS/MS	150	113.5	Y	Y			-0.75	173.3	55.489
2129	650.06	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON	135	134.3	Y	Y			-0.70	173.3	55.489
0619	650.24	Zearalenone (ppb)	LC-MS/MS	143	134	Y	Y			-0.63	173.3	55.489
0913	650.24	Zearalenone (ppb)	LC-MS/MS	151.3	141.5	Y	Y			-0.48	173.3	55.489
0407	650.07	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON	142.1	150.7	Y	Y			-0.48	173.3	55.489
0098	650.20	Zearalenone (ppb)	LC	140	160	Y	Y			-0.42	173.3	55.489
0590	650.06	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON	152	153	Y	Y			-0.37	173.3	55.489
0918	650.24	Zearalenone (ppb)	LC-MS/MS	152	163.2	Y	Y			-0.28	173.3	55.489
2113	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	130	190	Y	Y			-0.24	173.3	55.489
0413	650.20	Zearalenone (ppb)	LC	160	160	Y	Y			-0.24	173.3	55.489
2185	650.98	Zearalenone (ppb)	Other Rapid Test Kit	168	175	Y	Y			-0.03	173.3	55.489
0868	650.20	Zearalenone (ppb)	LC	180	184	Y	Y			0.16	173.3	55.489
2022	650.04	Zearalenone (ppb)	Romer AgraQuant ZON	187.1	187.5	Y	Y			0.25	173.3	55.489
0964	650.24	Zearalenone (ppb)	LC-MS/MS	197.4	192.8	Y	Y			0.39	173.3	55.489
0868	650.98	Zearalenone (ppb)	Other Rapid Test Kit	196	196	Y	Y			0.41	173.3	55.489
0868	650.04	Zearalenone (ppb)	Romer AgraQuant ZON	199	206	Y	Y			0.53	173.3	55.489
2053	650.24	Zearalenone (ppb)	LC-MS/MS	197	211	Y	Y			0.55	173.3	55.489
0910	650.20	Zearalenone (ppb)	LC	219	196	Y	Y			0.62	173.3	55.489
2226	650.06	Zearalenone (ppb)	r-Biopharm Ridascreen FAST ZON	212.9	204.1	Y	Y			0.63	173.3	55.489
0218	650.24	Zearalenone (ppb)	LC-MS/MS	220	206	Y	Y			0.72	173.3	55.489
2140	650.24	Zearalenone (ppb)	LC-MS/MS	214	218	Y	Y			0.77	173.3	55.489
0009	650.24	Zearalenone (ppb)	LC-MS/MS	241.6	222.9	Y	Y			1.06	173.3	55.489
0027	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	231	237	Y	Y			1.09	173.3	55.489
0723	650.04	Zearalenone (ppb)	Romer AgraQuant ZON	241	245	Y	Y			1.26	173.3	55.489
0870	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	251.2	241.9	Y	Y			1.32	173.3	55.489
0297	650.01	Zearalenone (ppb)	Neogen Veratox Zearalenone	267.3	262.9	Y	Y			1.65	173.3	55.489
0553	650.24	Zearalenone (ppb)	LC-MS/MS	352.9	290.8	Y	Y			2.68	173.3	55.489
0043	650.04	Zearalenone (ppb)	Romer AgraQuant ZON	303	383	Y	Y			3.06	173.3	55.489
0226	650.22	Zearalenone (ppb)	LC-FI, AOCS			N	N	2500	0.00%	NoZ	173.3	55.489

Notes: Interpreting Z Scores: Red indicates a normally distributed Z value >3 or <-3 (requires action), Orange = Z between 2 and 3 or -2 and -3 (warning) and Green = Z < 2 and >-2 (OK at 95%). If < 6 results used in calculations or only 1 of 2 results detected Z is Grey and Probability of Detection is for the Non-Detect (see documentation). A Red NoZ indicates both results Not Detected with a Probability Of Detecting a single value. Where the Assigned Value is ND then the LOD follows as (LOD) in the Analyte units. An asterix on the Analyte name indicates Reference Lab Value Used as Assigned Value and Z scores are calculated against the reference Lab. Results in square brackets removed from Robust calculations.